

# NRC Update Regulatory Programs and Activities in the Waste Arena

12th Annual DOD Low-Level Radioactive Waste Generators Meeting

> Patricia A. Santiago April 30, 2002



#### **Key Topics**

- Decommissioning
- LLW Disposal
- HLW Storage and Disposal
- Clearance of Solid Materials
- ISCORS
- Other Rulemakings
- Websites/Resources



# **Decommissioning**

- SDMP and Contaminated Sites
- Stewardship and Restricted Release
- Rulemakings
  - Financial Assurance
  - Entombment
- Lessons Learned
- Guidance
- Interagency Coordination



# Regulatory Issue Summary Decommissioning Lessons Learned

- Communications
  - Key to success
- Site Characterization
  - Groundwater monitoring data
- Decommissioning Cost Estimates
- Environmental Assessments



#### What Site is this?





# **Acceptance Reviews Decommissioning Plans**

- Site characterization
  - hydro-geological and radiological
- Dose modeling
- Final radiation survey
- Cost estimates
- Institutional controls
  - applicable only to restricted release



# **Decommissioning Guidance**

- NUREG 1727, Standard Review Plan
- NUREG 1748, Environmental Review Guidance
- NUREG 1575 (Rev 1), MARSSIM
- NUREG 1576, MARLAP
- NUREG 1757, Consolidated Guidance



# **Consolidated Guidance Decommissioning Process**

- NUREG 1757
  - Volume 1 Decommissioning Practices
  - Volume 2 Site characterization, dose modeling, surveys
    - Partial Site Release
  - Volume 3 Financial Assurance; recordkeeping



# **Interagency Coordination**

- EPA
  - Decommissioning
  - NEPA
- USACE
  - FUSRAP



# **West Valley Demonstration Project**



First LLW rail shipment from WVDP in 2000



Drums of cemented LLW stored at WVDP in special shielded aboveground facility-



HLW underground storage tanks under construction in 1960s



# LLW Disposal

- GAO Report 1999 (RCED-99-238)
  - LLW: States are Not Developing Disposal Facilities
- Compact Sites and commercial disposal facilities
- Rulemaking and guidance development
  - Assured Isolation
- Greater Than Class C

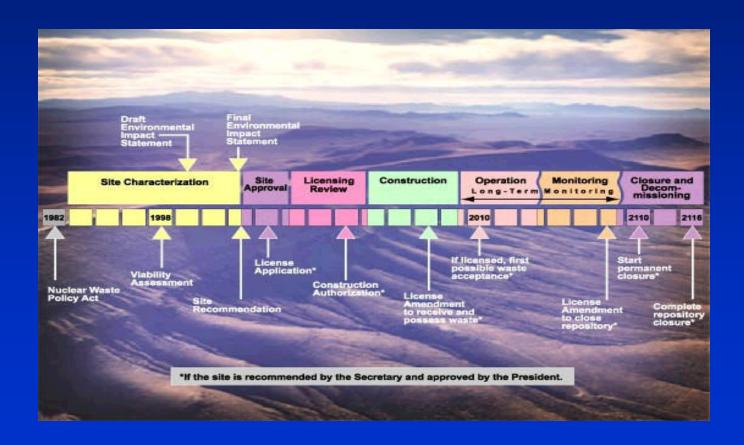


# **HLW Storage and Disposal**

- Rulemaking and guidance development
  - Part 63
  - Part 963
  - Unlikely Events
- HLW repository hearing schedule



# **HLW Storage and Disposal**





#### **Control of Solid Materials**

- NRC efforts initiated in 1994
- Developed technical basis
  - NUREG 1640
- Summaries of public comments
  - NUREG/CR-6682
- NRC website and list server
  - www.nrc.gov/materials/medical.html



# **Status of Regulatory Efforts**

- Defer Rulemaking
- National Academies Study
  - Assess technical bases, policies and precedents
  - Recommend approach for proceeding
  - Report provided March 2002
  - NAS website: www.nas.edu
- Role of international clearance standards



#### **NAS** Recommendations

- Develop broader range of alternatives
- Integrate decision-making with stakeholder process
- Adopt overarching policy statement on management and disposition of solids
- Employ a dose-based standard
- NUREG 1640: expand scope
- Continue review of international efforts



#### **Interagency Steering Committee on Radiation Standards**

- Objectives:
  - Promote consistent standards
  - Identify interagency radiation protection issues
- Annual Reports NUREG 1707
- Subcommittees
  - Clean-up
  - Mixed Waste
  - Recycle
  - Risk Harmonization

- Sewage
- NORM
- Federal Guidance



# **Other Rulemakings**

- NUREG 0936
  - Part 40, Transfer of Source Material from Licensees to Exempt Persons
  - Part 71, Transportation
  - Part 35, Medical



#### Websites/Resources

- Websites
  - <u>www.nrc.gov</u>/reading-rm/doc-collections
  - www.iscors.org
- Workshops
  - Decommissioning August 2002
  - Inspection Guidance for Part 35, June 2002
- Public Meetings
  - ISCORS, July 2002
  - Decommissioning, September 2002



Patricia A. Santiago

Pas2@nrc.gov

Mail Stop T7J8 Washington, DC 20555

301-415-7269

Fax: 301-415-7238



